

## ABSTRACT

### Method for conjoint channel and direction of arrival estimation

Method of estimating the channel and the direction of arrival of a signal transmitted by a transmitter and received by an array of antennae after being propagated along at least one path, comprising, for each path, a first step of estimating phase differences ( $\xi_e$ ) in the signals received by the different antennae in the array, a second step of estimating the angle of arrival ( $\theta$ ) of the signal as well as the phase rotation ( $\nu$ ) undergone by the signal along the said path from the said phase differences and a third step of estimating the attenuation ( $\alpha$ ) undergone by the signal along the said path from the estimated values ( $\hat{\nu}, \hat{\theta}$ ) of the phase rotation and the angle of arrival.